

# Potential, Plans, and Programs

**Conservation Potential Assessment Workshop**  
**Bonneville Power Administration**  
**September 8, 2008**



Presented by:  
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# Energy Efficiency Potential

## Technical Potential

What is the technical energy efficiency potential given baseline consumption patterns and available technologies?

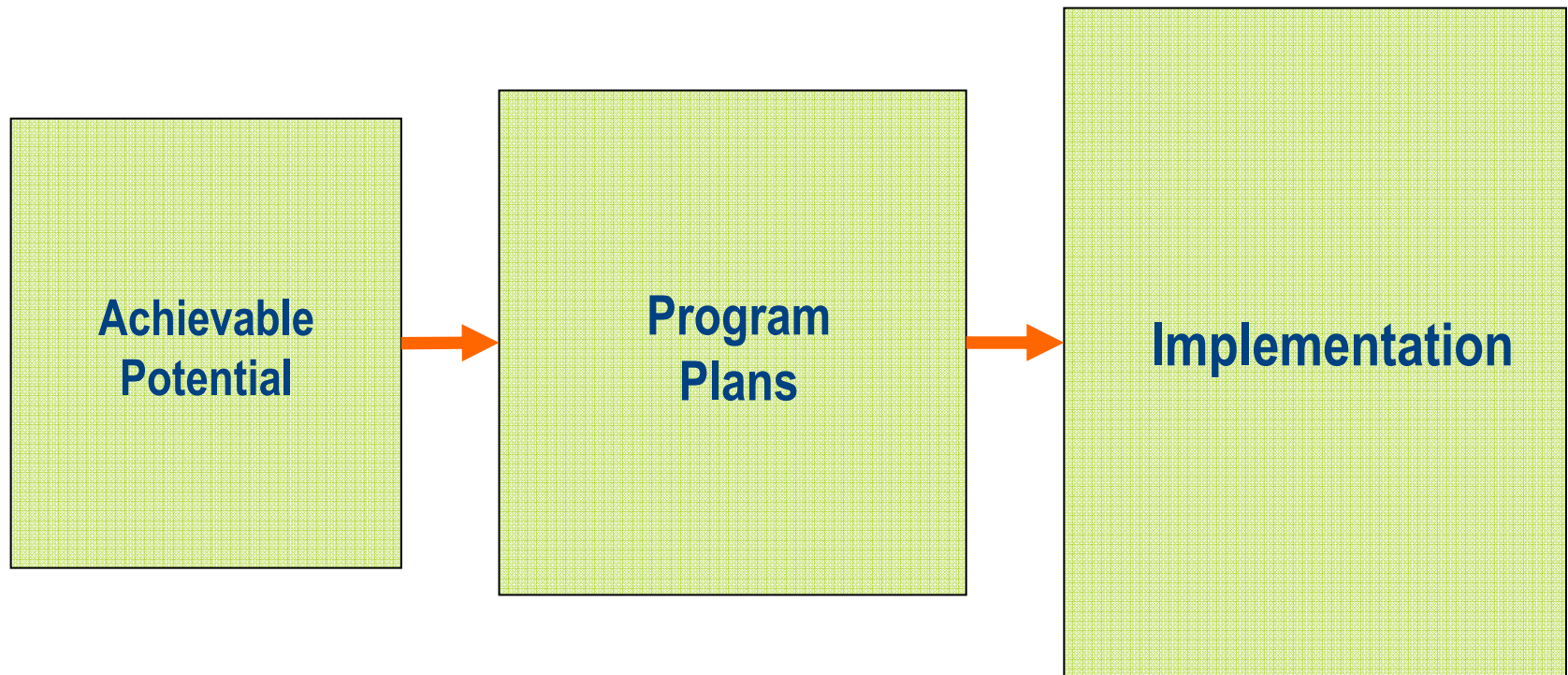
## Economic Potential

What is the energy efficiency potential from application of cost-effective measures?

## Achievable Potential

What energy efficiency improvements can be achieved with available program resources and given customer preferences?

# Transition to Programs



# Potential tells us . . .

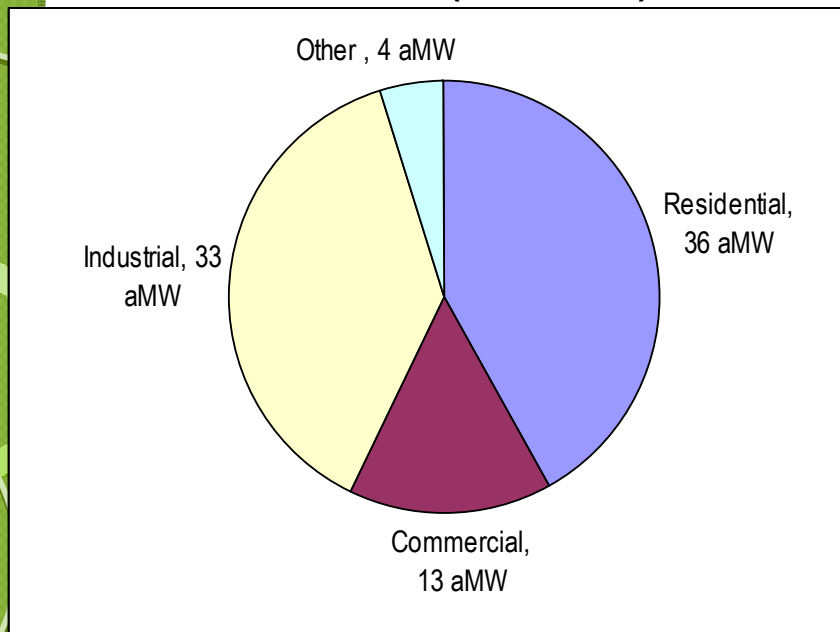
- How much energy efficiency resource exists
- What end-uses or customer segments present the greatest savings opportunities
- Cost of energy savings resources

# Comparing Potential to Existing Programs

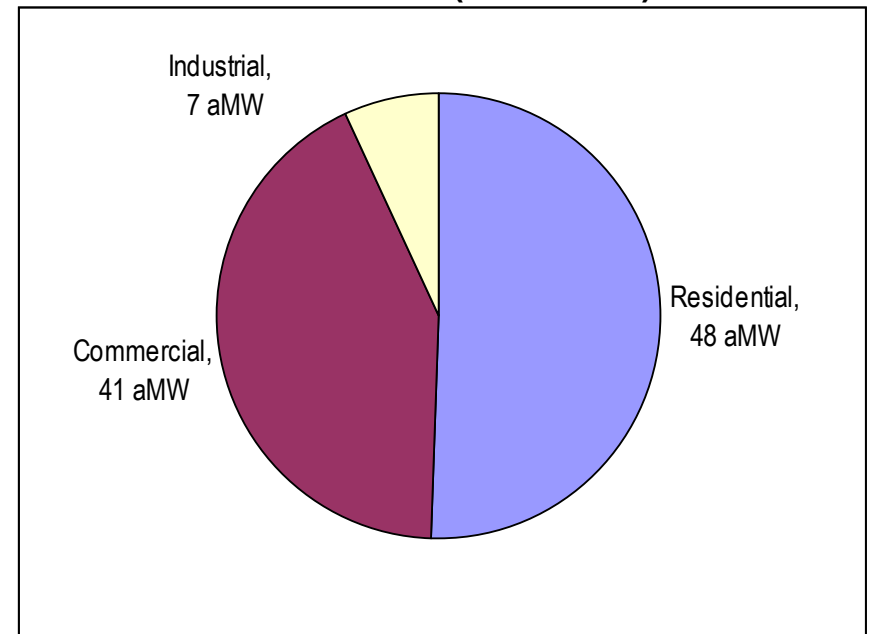
- Identifies any gaps or potential not addressed by the identified programs
- Ensures the balance of the program portfolio
  - Options for all customer segments, including “hard-to-reach” customers, and
  - Comprehensive mix of measures and delivery strategies targeted to various end uses and customer groups
- Helps identify saturation of measures or programs

# Impacts vs. Potential

**Historical Impacts –  
Cumulative (1980-2007)**

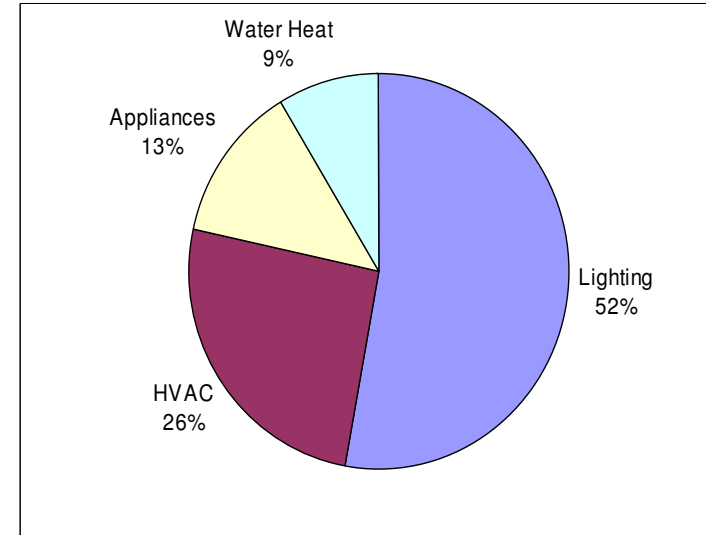
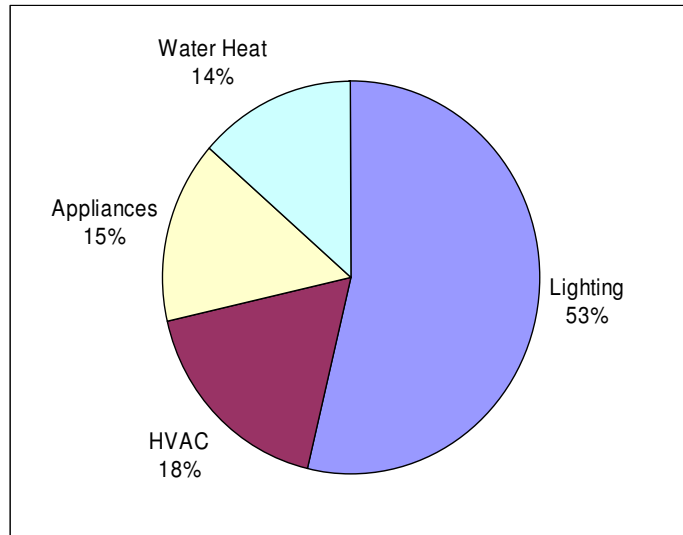


**Achievable Potential –  
Cumulative (2008-2020)**

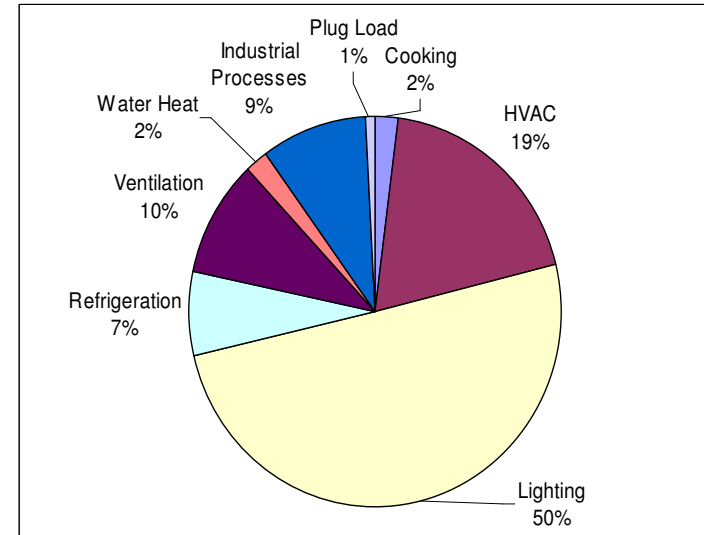
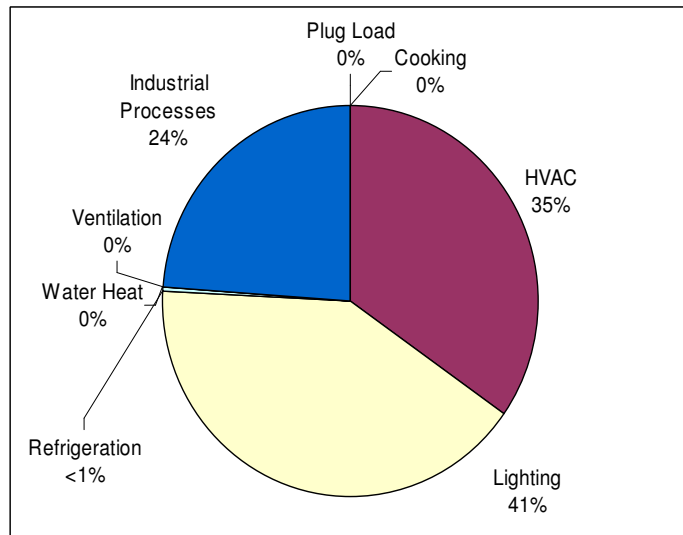




## Residential Programs – Impacts vs. Potential



## Commercial & Industrial Programs – Impacts vs. Potential





# Key Elements of a Program Plan

- Program overview/objectives
- Target markets
- Qualifying measures
- Program marketing strategy
- Incentive strategy
- Delivery approach
- Participation goals and impact targets
- Budget
- Cost-effectiveness analysis
- EM&V plans



# Program Plans

- *Program description* – including program theory, the market barriers that the program is designed to address, and overall program objectives
- *Target markets* – specific customer group or characteristics of the customers targets, including the size of these market and typical customer characteristics

## Program Plans (cont.)

- *Qualifying measures* – a listing of the eligible measures, the end use(s) addressed, efficiency levels, relevant standards and technological innovations, measure costs, and impacts
- *Program marketing* – communication strategies to be employed to inform target market of the availability of the program; outreach efforts to engage potential program partners, trade allies or other market actors; and education efforts to inform customers of the benefits of energy-efficient technologies

## Program Plans (cont.)

- *Incentive strategies* – types and level of incentives used to encourage the adoption of energy-efficient technologies
- *Delivery strategies* – how the program will be deployed, including staffing or contracting needs, administrative resource requirements, and roles and responsibilities of trade allies

# Program Plans (cont.)

Informed  
by CPA

- *Participation goals or targets* – what market penetration is expected to be achieved based on available resources, target market characteristics, and selected market intervention strategies
- *Program budget* – including an overall budget and allocation of budget to incentives (for end users and up-stream market actors, if appropriate), administration, marketing and communications, and evaluation and reporting

## Program Plans (cont.)

- *Cost-effectiveness results* – cost effectiveness, measured from the relevant perspectives (total resource, utility, participant), for programs, sectors and the program portfolio overall
- *Evaluation, monitoring and verification (EM&V)* – key program metrics (savings impacts, participant satisfaction, trade ally participation) to be tracked and approaches to analyze program performance, both for external reporting and to support ongoing improvement of program delivery



# Implementation

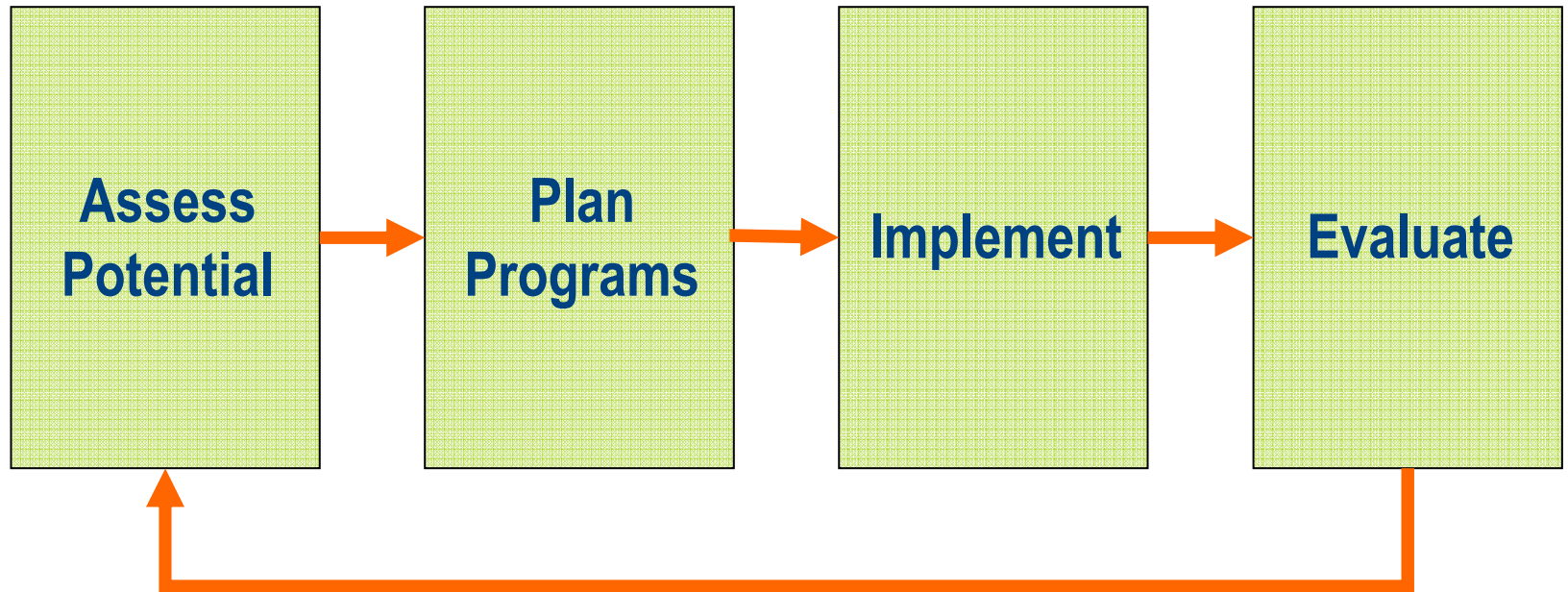
- Map detailed implementation processes
  - Outreach and customer recruiting,
  - Technical assistance delivery
  - Incentives management
  - Quality control and assurance
  - Tracking and reporting
- Establish an implementation timeline
- Staff up
  - Internal
  - Program implementation contractors
- Develop marketing and collateral materials
  - Web-site
  - Forms



# Evaluation

- Is the program generating the desired effect?
- Was the program implemented as designed?
- Were there any changes in the design over the program's operation?
- Are the target audiences being reached?
- What changes, if any, are recommended for the program design and implementation?
- Across the portfolio, how are different programs performing?
- How valid are assumptions made in previous planning exercises? What assumptions should be modified?

# Continuous Improvement





# EWEB

Eugene Water & Electric Board

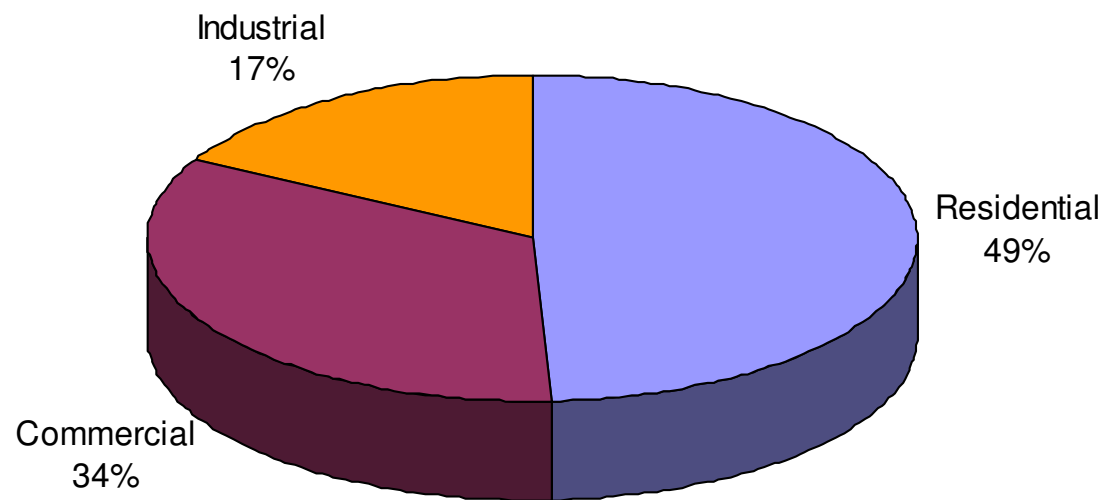
# Realizing Your Potential

Bob Lorenzen  
Energy Management Section Manager

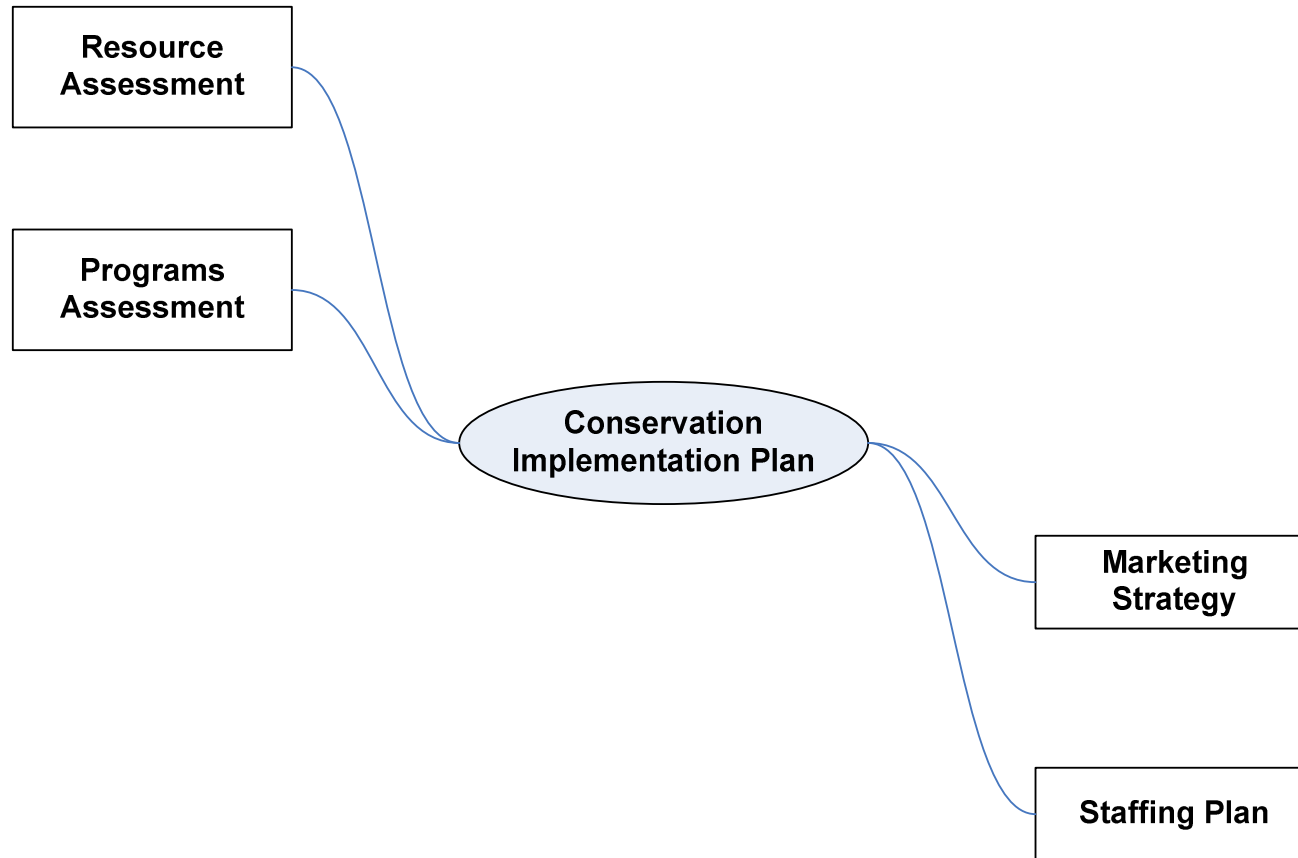
# Historic Conservation Resource

**EWEB's Conservation Resource 1982 - 2006**

**54 aMW**



# We Had a Concept



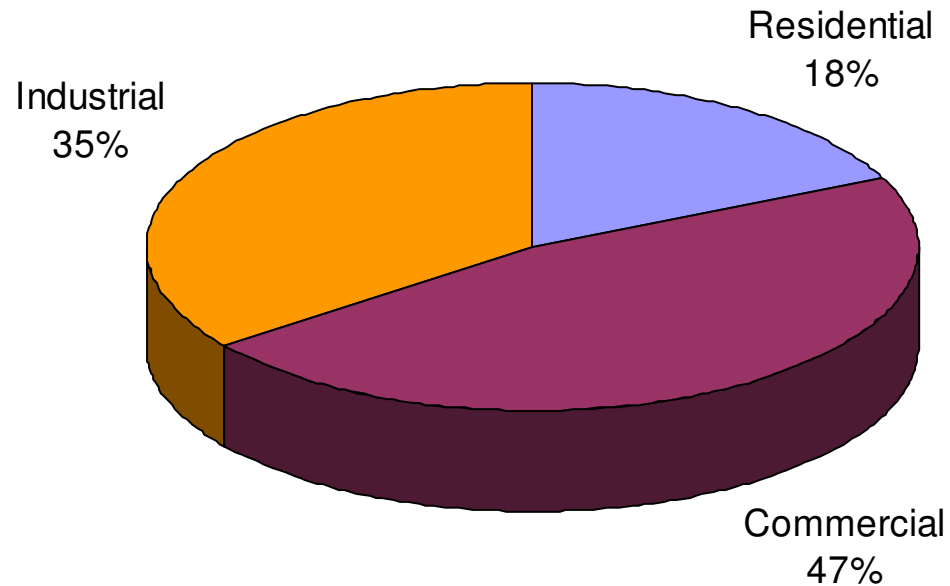


# Resource Planning Questions

1. How much demand-side resource is available?
2. What technologies/measures will the resource come from?
3. Do we have the right programs and/or program designs to acquire the resource?
4. How might existing programs be modified to more effectively acquire the resource?
5. What new programs should be considered?

# Resource Potential by Sector

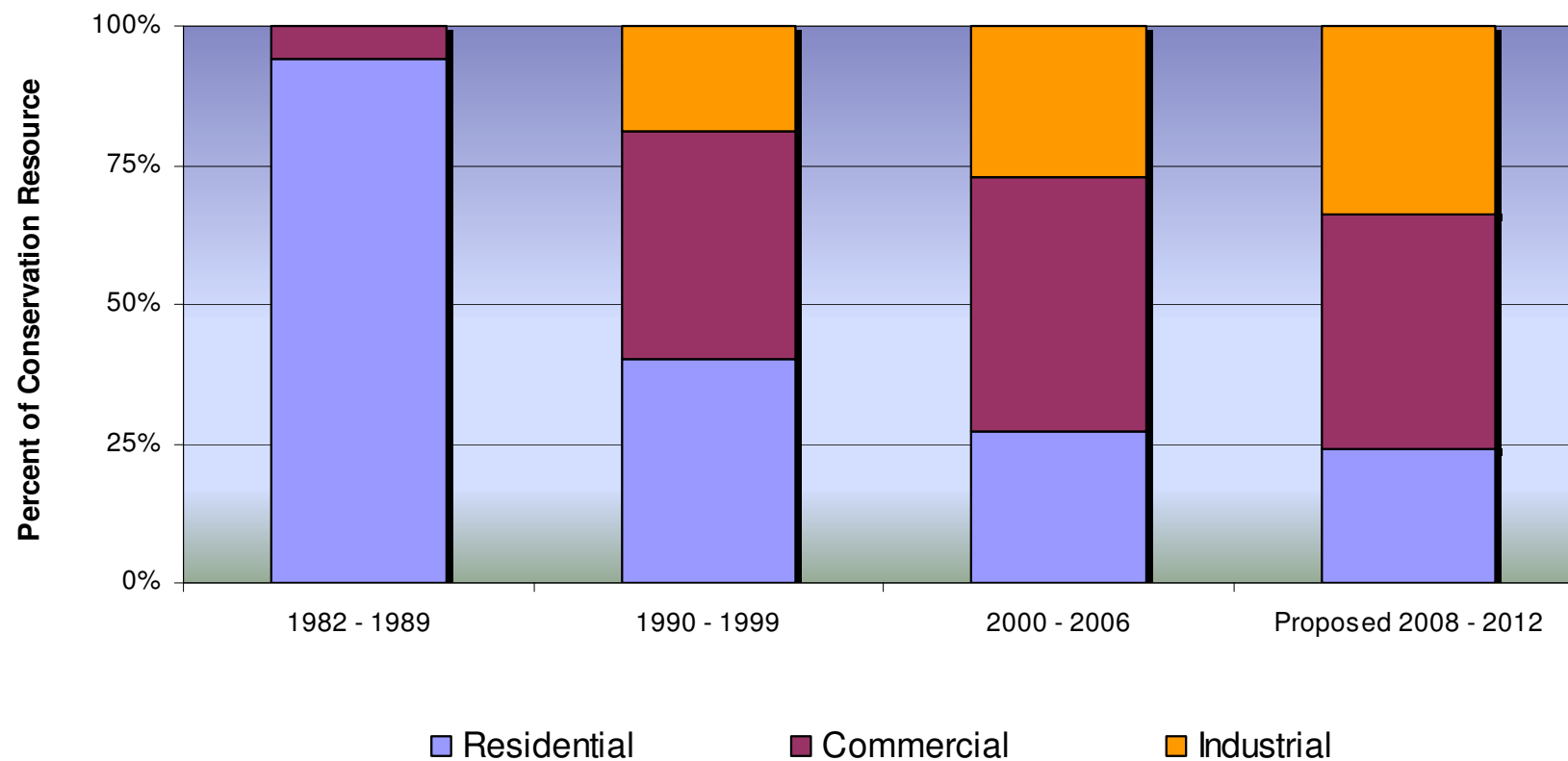
**EWEB's Conservation Resource Potential 2027**  
**54 aMW**



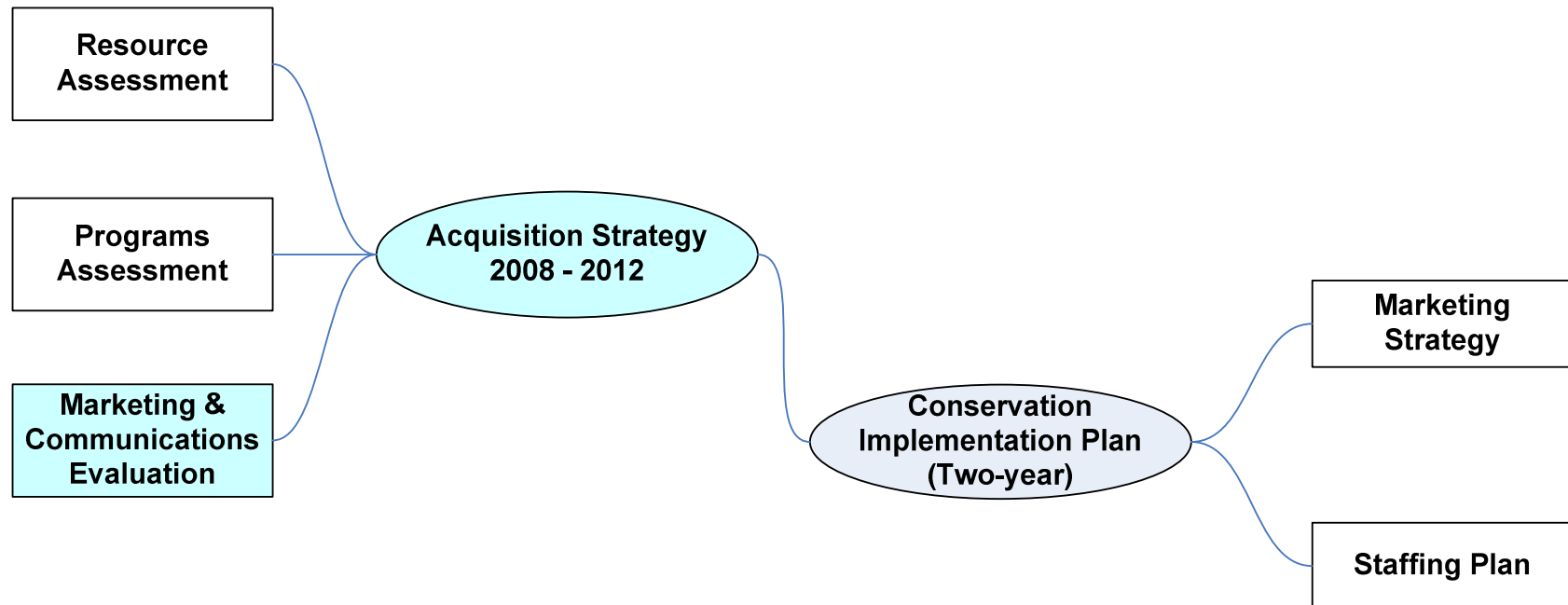
# Resource Assessment Findings

- Remaining DSM potential is about the same size as that achieved to date.
- Capture of remaining resource will require some redesign of programs to focus on the most important measures and end uses.
- Remaining resource will cost more to acquire.

# Conservation Resource Sector Shares



# EWEB's Conservation Acquisition Plan

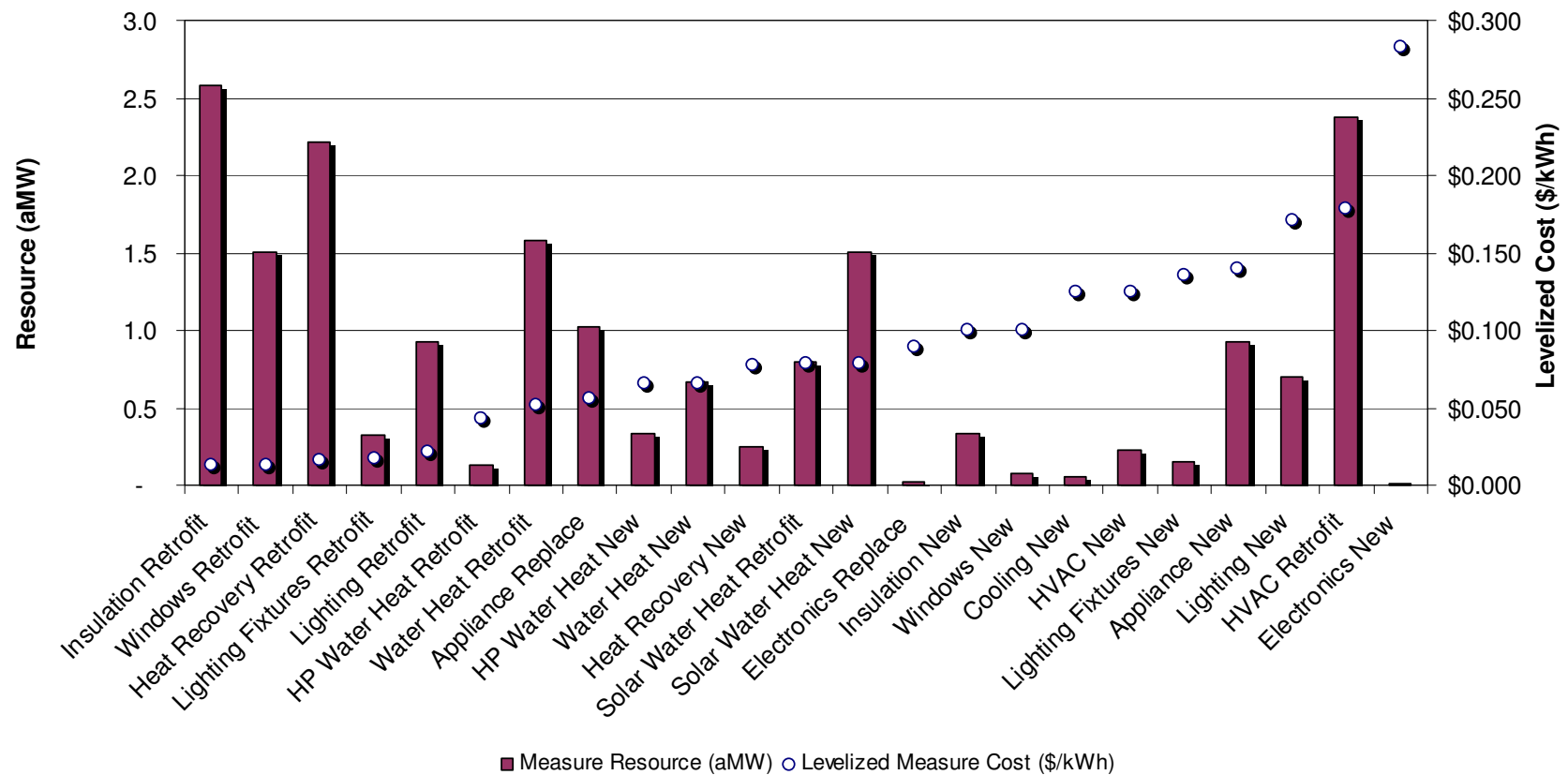


# How is EWEB Adjusting?

- Aligning programs to focus on resource potential.
- Employing varied delivery strategies to increase program participation.
- Aggressively pursuing incorporation of emerging technologies.
- Developing more sophisticated approaches to marketing and customer communications.
- Re-making our staff.
- Copying “best-practices” programs.



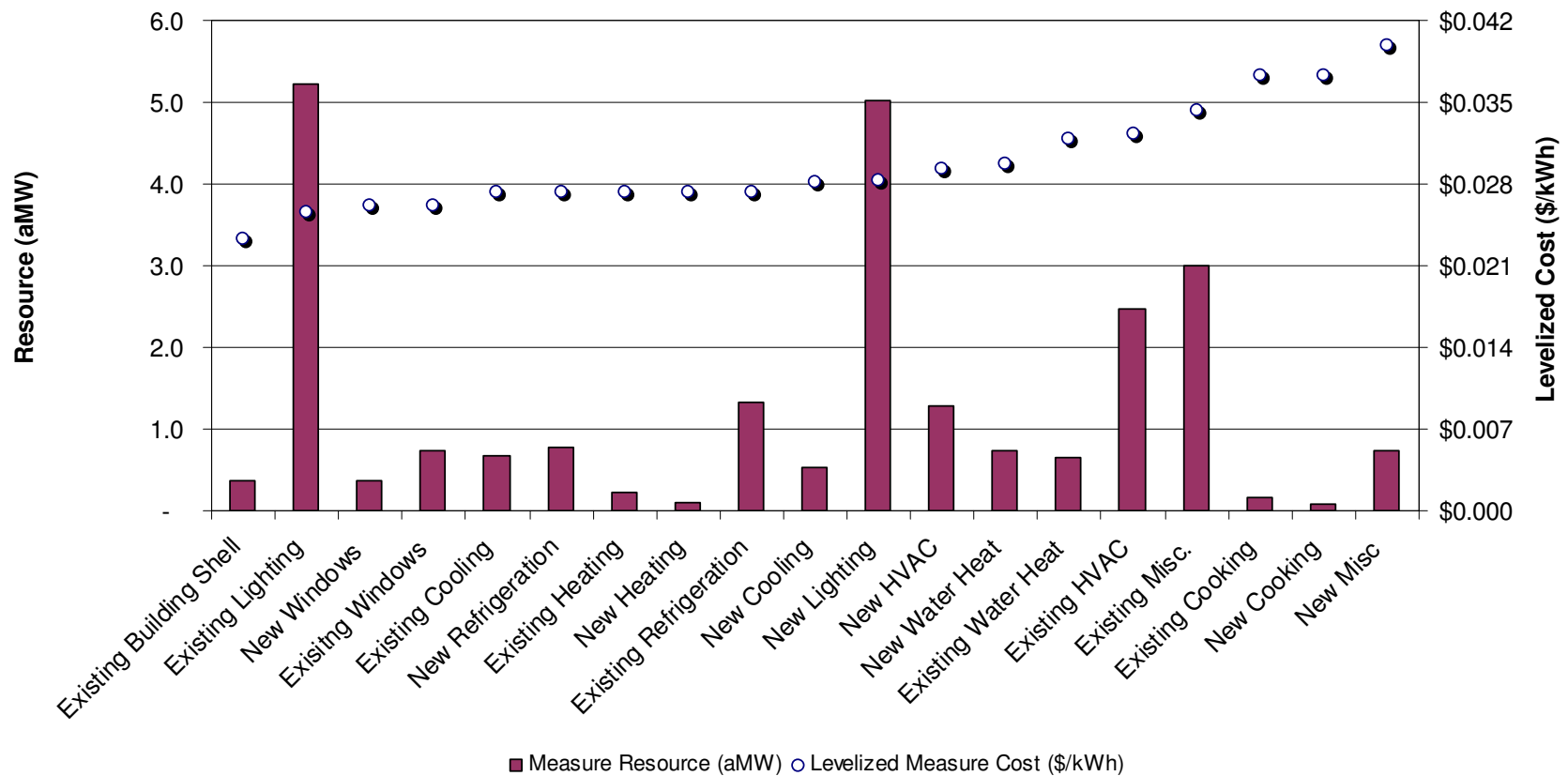
# Residential Sector Resource Potential



# Residential Examples

- Focusing Wx on M-F and rental.
- Developing whole-house approach (home performance) for S-F.
- Appliances, lighting, and water heating.
- Program efficiency improvements.
  - Employing more contractor direct install.
  - Pipe wrap and CFL direct install on all site visits.
  - Increased partnering and program uniformity between utilities.

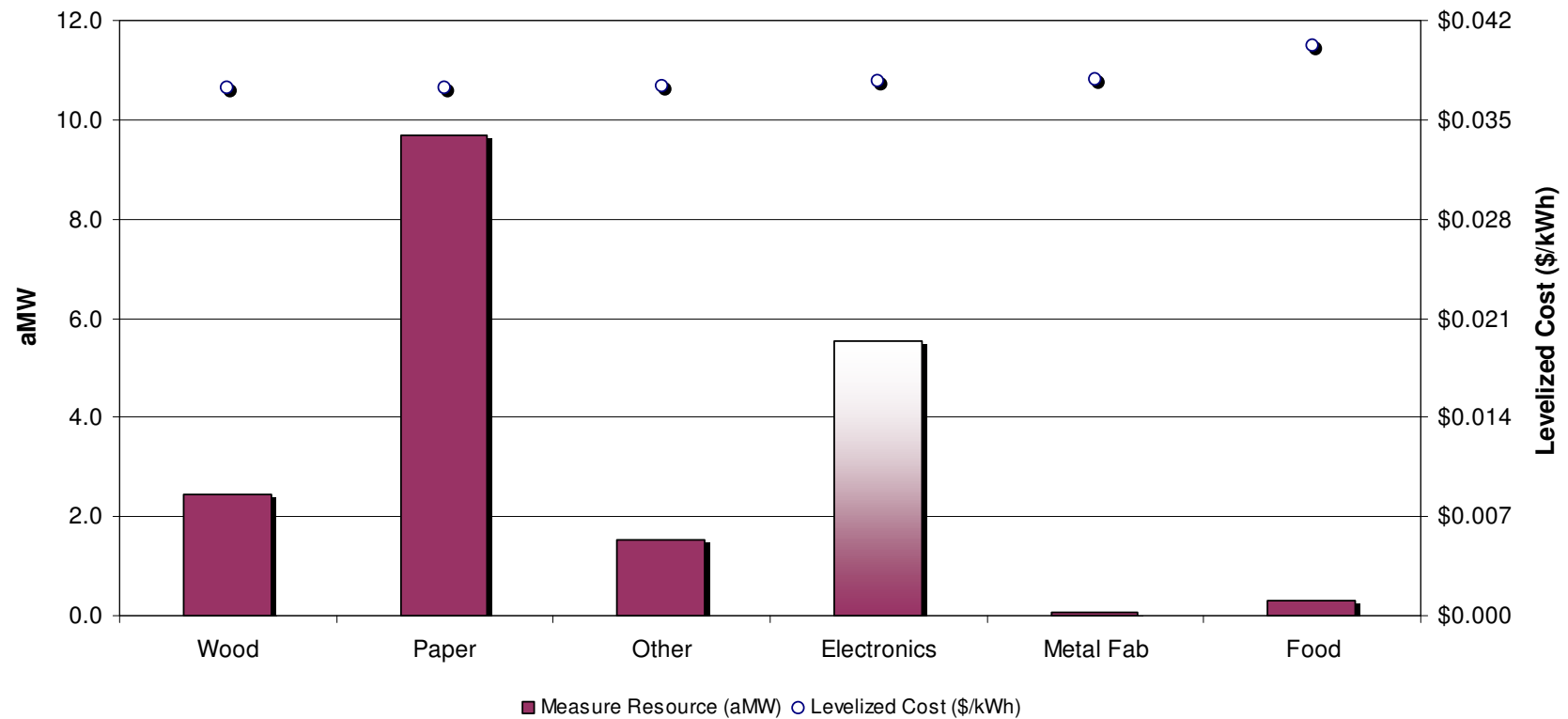
# Commercial Sector Resource Potential



# Commercial Examples

- Enhance existing relationships with trade allies, property managers, and facilities managers.
- Simplify new construction program for small structures and tenant infill.
- Developing specialized small commercial program.
  - Broader and more flexible incentives
  - Increasing use of single measure rebates
  - Improving outreach and promotion
- Adopt emerging technologies into programs.

# Industrial Sector Resource Potential



# Industrial Examples

- Developing a comprehensive marketing approach.
  - Segregating industrial customers.
  - Creating targeted marketing plan for each customer type.
- Developing program approaches that target various customer types and technologies.
- Evaluating M&V approach to match level of detail to measure and program offering.
- Evaluate the effectiveness of Contract Customer Rate Credit Program.